This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images, please do not report the images to the Image Problem Mailbox.

Serial No.: To Be Assigned
Inventor: Raja Shekar C S
Filed: January 28, 2004
Title: Methods and Systems for Unnumbered Network Link Discovery
Ref. No. 971-165
John V. Harmeyer, Dinsmore & Shohl LLP, 1900 Chemed Center,
255 East Fifth Street, Cincinnati, Ohio 45202 (513) 977-8649

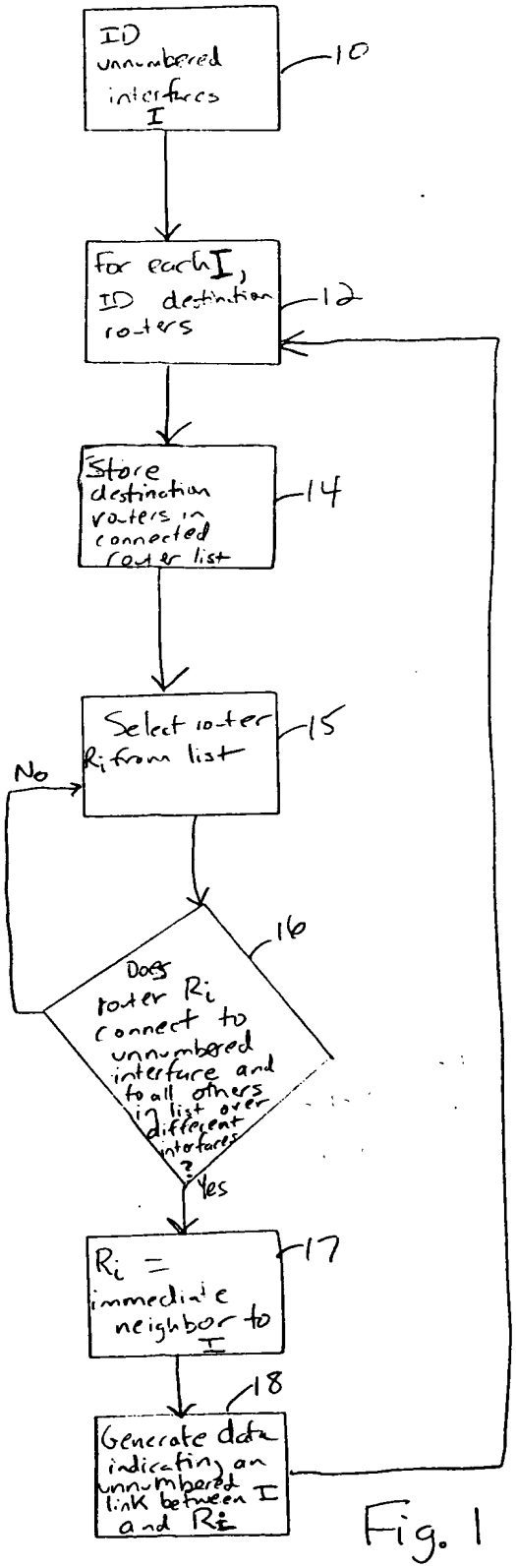

Fig. 1

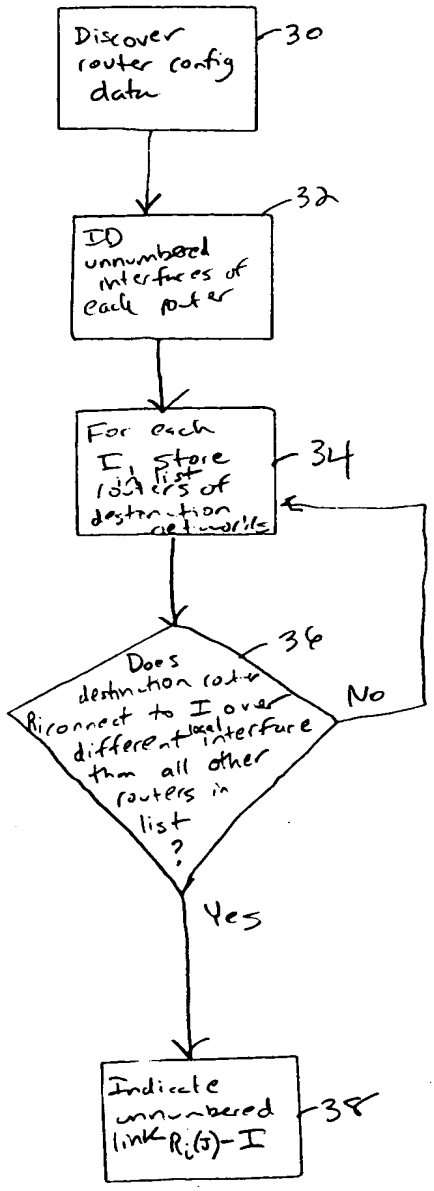

Fig. 3

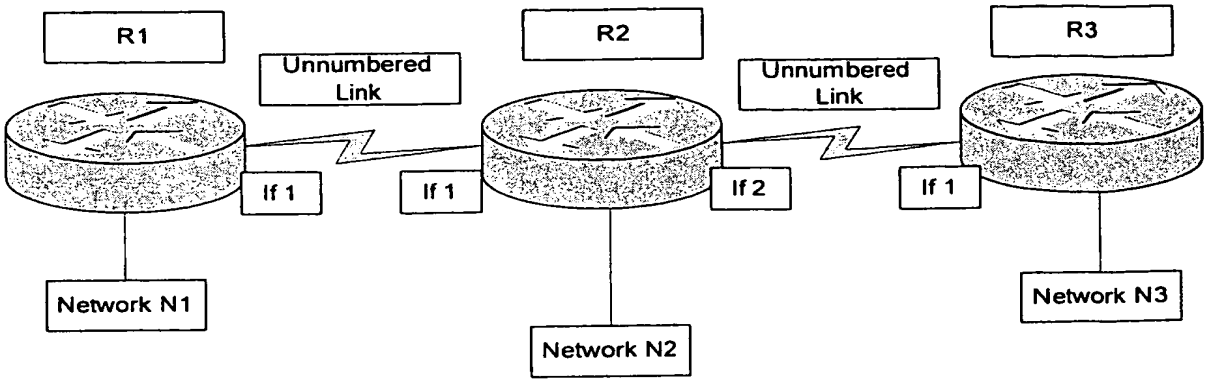
R1
Unnumbered Link
R2
Unnumbered Link
R3
If 1
If 1
If 2
If 1
Network N1
Network N2
Network N3

Fig. 2

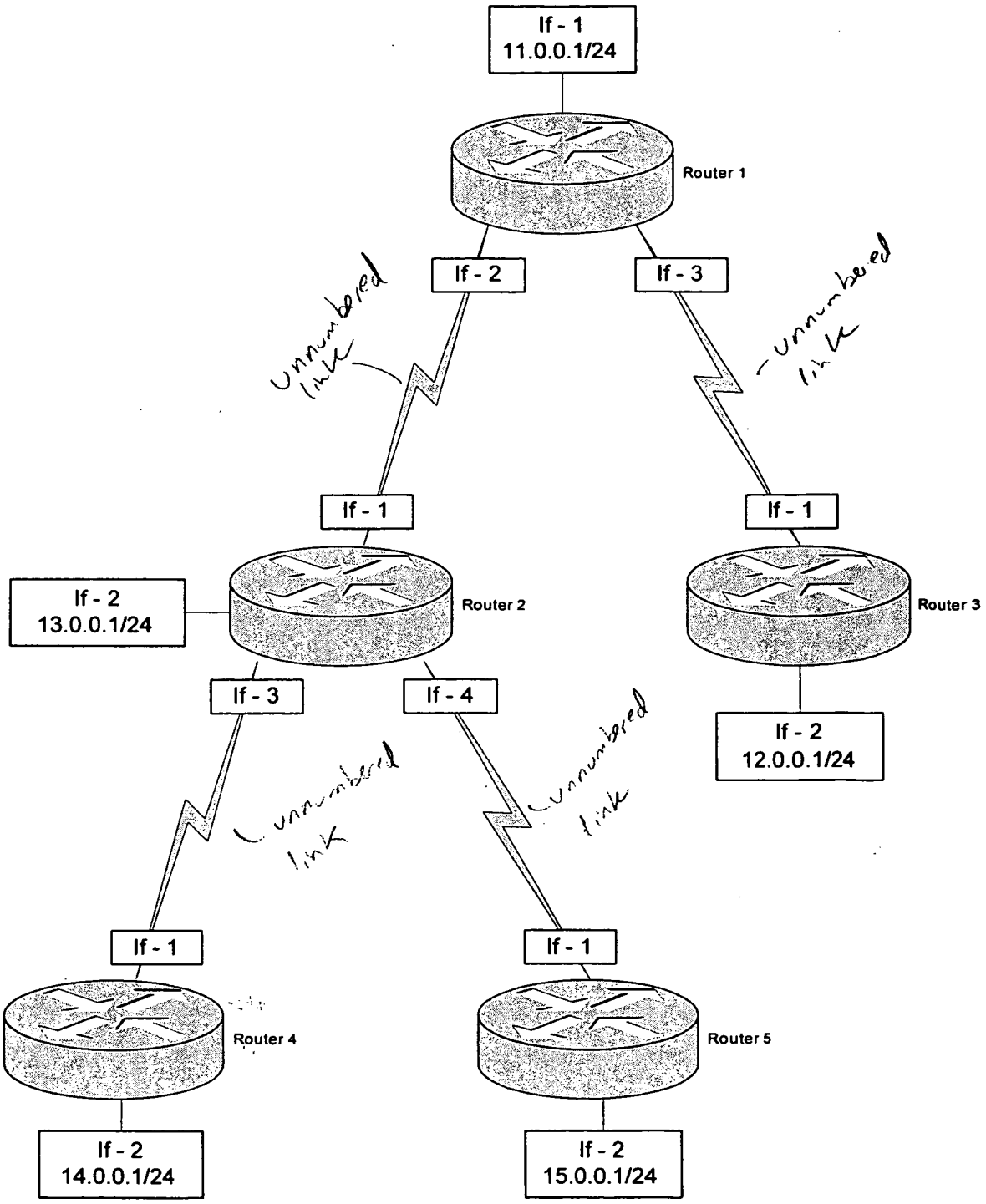
If - 1
11.0.0.1/24
Router 1
If - 2
If - 3
Unnumbered link
Unnumbered link
If - 1
If - 1
If - 2
13.0.0.1/24
Router 2
Router 3
If - 3
If - 4
If - 2
12.0.0.1/24
Unnumbered link
Unnumbered link
If - 1
If - 1
Router 4
Router 5
If - 2
14.0.0.1/24
If - 2
15.0.0.1/24

Fig. 4

Serial No.: To Be Assigned
Inventor: Raja Shekar C S
Filed: January 28, 2004
Title: Methods and Systems for Unnumbered Network Link Discovery
Ref. No. 971-165
John V. Harmeyer, Dinsmore & Shohl LLP, 1900 Chemed Center,
255 East Fifth Street, Cincinnati, Ohio 45202 (513) 977-8649

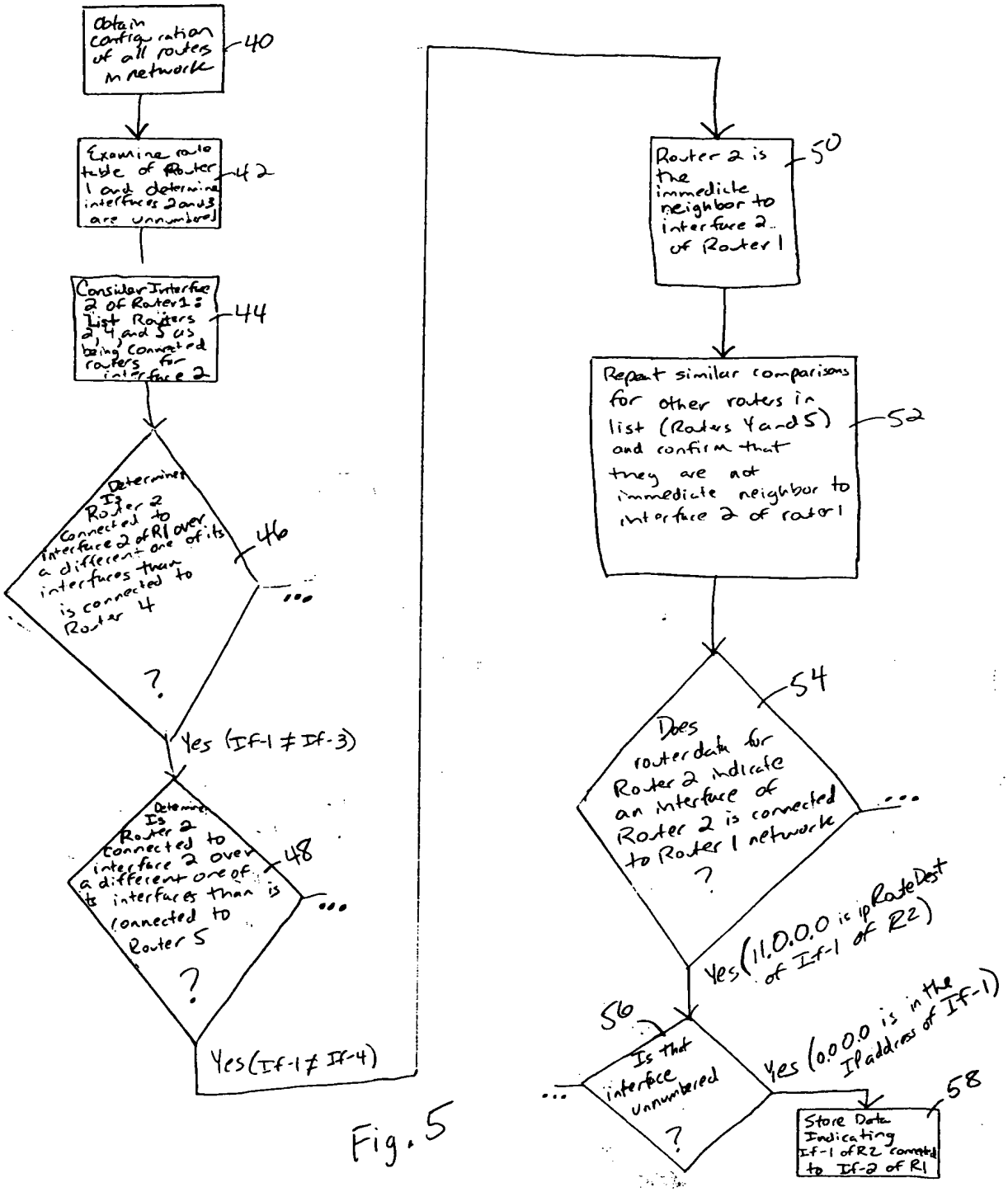

Fig. 5

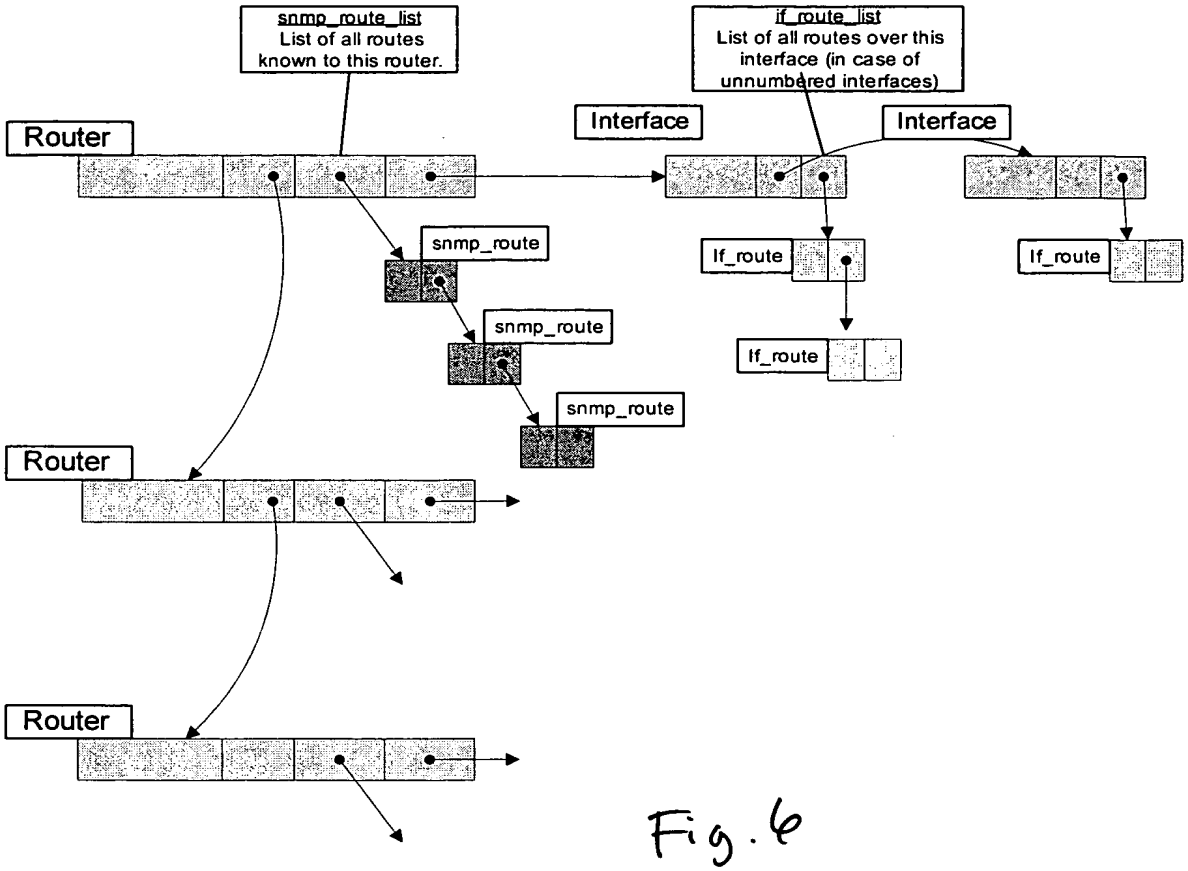
snmp_route_list
List of all routes known to this router.
if_route_list
List of all routes over this interface (in case of unnumbered interfaces)
Router
Interface
Interface
snmp_route
snmp_route
snmp_route
If_route
If_route
If_route
Router
Router

Fig. 6

Serial No.: To Be Assigned
Inventor: Raja Shekar C S
Filed: January 28, 2004
Title: Methods and Systems for Unnumbered Network Link Discovery
Ref. No. 971-165
John V. Harmeyer, Dinsmore & Shohl LLP, 1900 Chemed Center,
255 East Fifth Street, Cincinnati, Ohio 45202 (513) 977-8649

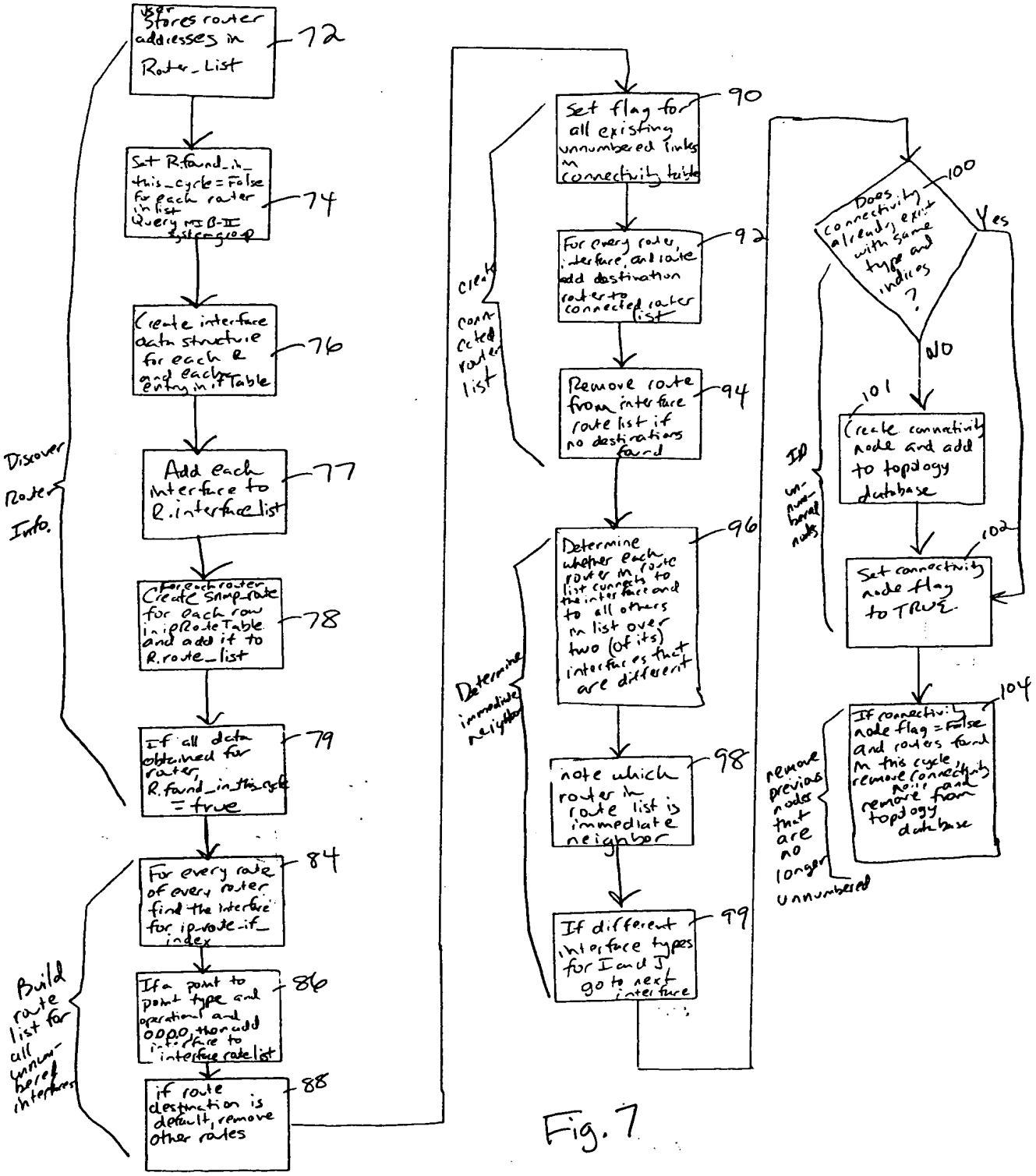

Fig. 7

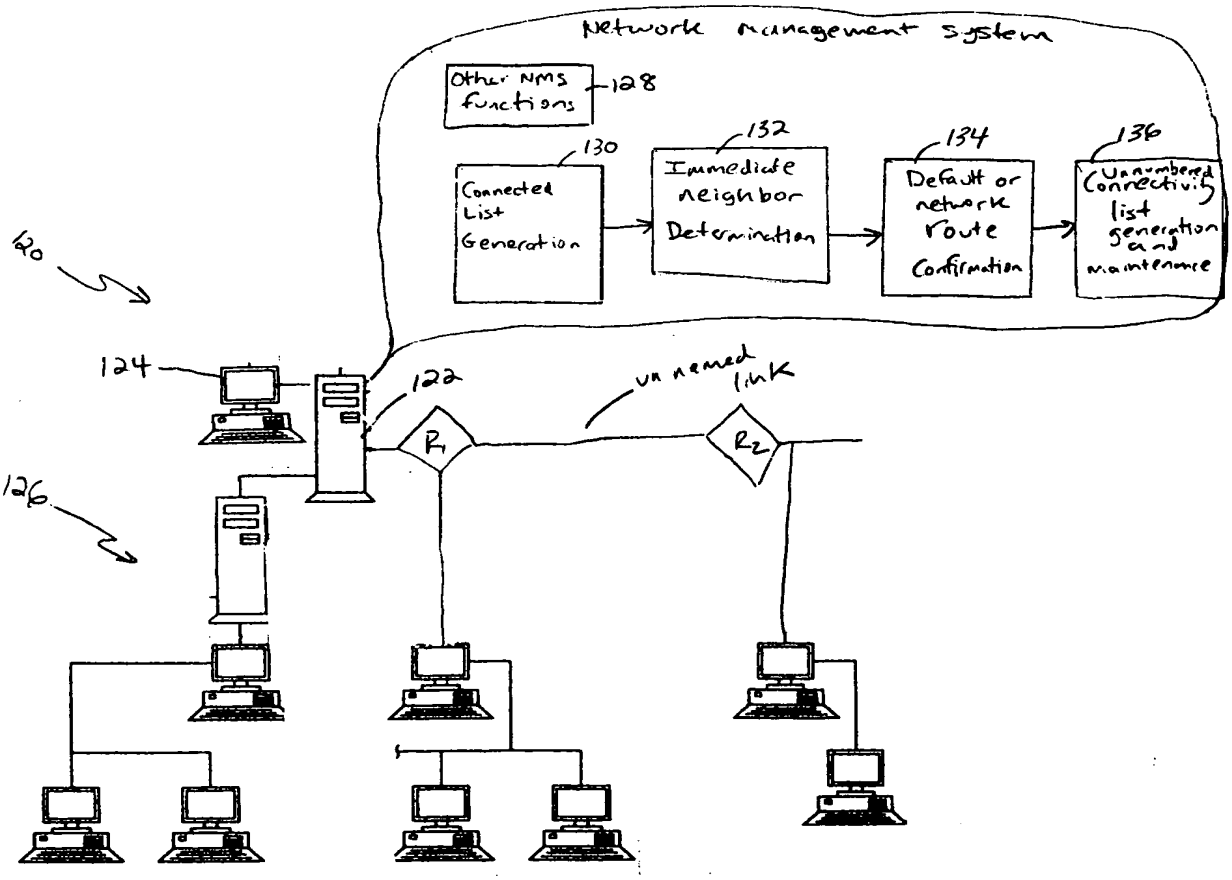
Network management system
Other NMS functions
128
130
Connected List Generation
132
Immediate neighbor Determination
134
Default or network route Confirmation
136
Unnumbered Connectivity list generation and maintenance
120
124
122
Unnamed link
R1
R2
126

Fig. 8